ABSTRACT

The present invention relates to inhibitors of the KDEL receptor and therapeutic uses therefor. Certain proteins are functionally retained in the cellular endoplasmic reticulum via an interaction between a KDEL sequence and its receptor. According to the invention, blocking this interaction with a KDEL receptor inhibitor promotes the secretion of such proteins. In specific embodiments of the invention, KDEL receptor inhibitors may be used to promote the secretion of heat shock proteins, thereby rendering the secreted heat shock proteins more accessible to the immune system and improving the immune response to heat shock protein-associated antigens.